

Using the Set-up Menu

5 Touch **[OUTPUT]** to select the output function of the COM port

The setting changes as follows each time it is touched.

“OFF(camera)” → “GPS OUT” → “PACKET” → “WAYPOINT”

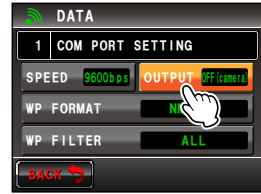
OFF (camera): The output function of the COM port is not used (invalid operation).

GPS OUT: Outputs the GPS data obtained by the radio.

PACKET: Outputs the AX.25 packet communication data received using the in-built modem function.

WAYPOINT: Outputs the position information of other station beacons obtained from the APRS packets received as WAYPOINT data.

Tip Factory default value: OFF (camera)



6 Touch **[WP FORMAT]** to select the data format

This sets the number of digits in the call sign information of the APRS beacon station appended to each data when “WAYPOINT” is selected in Step 5 (the data will be output using the NMEA-0183 \$GPWPL format).

The setting changes as follows each time it is touched.

“NMEA 9” → “NMEA 8” → “NMEA 7” → “NMEA 6”

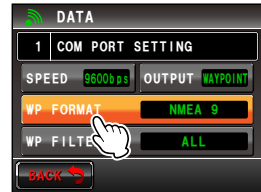
NMEA 9: The call sign will be limited to 9 digits on the right (Example: The call sign information for JQ1YBG-14 is “JQ1YBG-14”).

NMEA 8: The call sign will be limited to 8 digits on the right (Example: The call sign information for JQ1YBG-14 is “Q1YBG-14”).

NMEA 7: The call sign will be limited to 7 digits on the right (Example: The call sign information for JQ1YBG-14 is “1YBG-14”).

NMEA 6: The call sign will be limited to 6 digits on the right (Example: The call sign information for JQ1YBG-14 is “YBG-14”).

Tip Factory default value: NMEA 9



Using the Set-up Menu

7 Touch **[WP FILTER]** to select the forwarding content

This sets the type of beacon that you would like to output when “WAYPOINT” is selected in Step 5. The setting changes as follows each time it is touched.

“ALL” → “MOBILE” → “FREQUENCY” → “OBJECT/ITEM” → “DIGIPEATER” → “VoIP” → “WEATHER” → “YAESU” → “CALL RINGER” → “RNG RINGER”

ALL: Outputs all beacons received.

MOBILE: Outputs only mobile stations.

FREQUENCY: Outputs only the stations with frequency information.

OBJECT/ITEM: Outputs only the object station or item station.

DIGIPEATER: Outputs only the digital repeater station.

VoIP: Outputs only VoIP stations such as WIRES.

WEATHER: Outputs only the weather station.

YAESU: Outputs only stations which are using Yaesu transceivers.

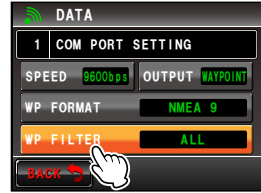
CALL RINGER: Outputs only the information of the call sign ringer station set using **[10 APRS RINGER (CALL)]** in the APRS set-up menu.

RNG RINGER: Outputs only the information of the station deemed to be the approaching station using the **[9 APRS RINGER]** range ringer function in the APRS set-up menu.

Tip Factory default value: ALL

8 Press **[DISP/END]** for one second or longer

The COM port will be set and the display will return to the previous screen.

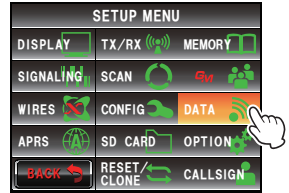


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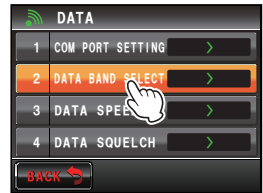
Setting the operating band of the APRS and data communication

The operating band of the APRS (internal modem) and data communication (when using the [DATA] jack at the back of the main body) can be set.

- 1 Press **[DMSF]** for one second or longer
 The set-up menu will be displayed.
- 2 Touch **[DATA]**



- 3 Touch **[2 DATA BAND SELECT]**
 The screen for the detailed settings will be displayed.



- 4 Touch **[APRS]** to select the APRS operating band
 The setting changes as follows each time it is touched.

“A-BAND FIX” → “B-BAND FIX” → “A=TX/B=RX” →
 “A=RX/B=TX” → “MAIN BAND” → “SUB BAND”

A-BAND FIX: The upper band will be selected.

B-BAND FIX: The lower band will be selected.

A=TX/B=RX: Transmits using the upper band and receives using the lower band.

A=RX/B=TX: Receives using the upper band and transmits using the lower band.

MAIN BAND: The main band will be selected.

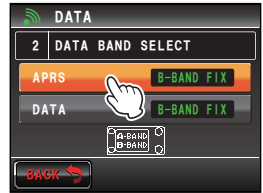
SUB BAND: The sub-band will be selected.

Tip Factory default value: B-BAND FIX

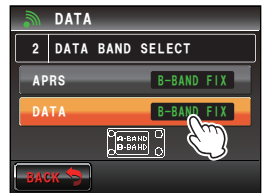
- 5 Touch **[DATA]** to select the data transmission operating band

Repeat Step 4 to set the data communication operating band.

Tip Factory default value: B-BAND FIX




- 6 Press **[DMSF]** for one second or longer
 The operating band of the APRS and data communication will be set and the display will return to the previous screen.

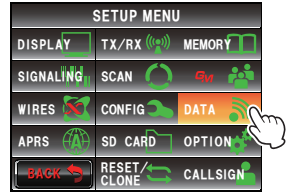


Using the Set-up Menu

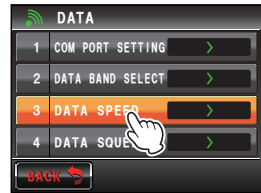
Setting the baud rate of the APRS and data communication

The baud rate of the APRS (internal modem) and data communication (when using the [DATA] jack at the back of the main body) can be set.

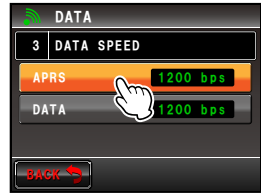
- 1 Press  for one second or longer
 The set-up menu will be displayed.
- 2 Touch **[DATA]**



- 3 Touch **[3 DATA SPEED]**
 The screen for the detailed settings will be displayed.

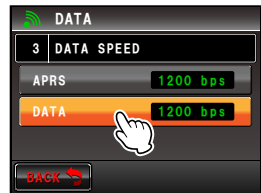


- 4 Touch **[APRS]** to select the packet communication speed
 The setting will switch between “1200 bps” and “9600 bps” each time it is touched.
 1200 bps: Sets the speed as AFSK 1200 bps packet.
 9600 bps: Sets the speed as GMSK 9600 bps packet.




Tip Factory default value: 1200 bps

- 5 Touch **[DATA]** to select the data communication speed
 Repeat Step 4 to set the data communication speed.



Tip Factory default value: 1200 bps

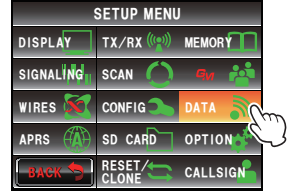
- 6 Press  for one second or longer
 The baud rate of the APRS and data communication will be set and the display will return to the previous screen.

Using the Set-up Menu

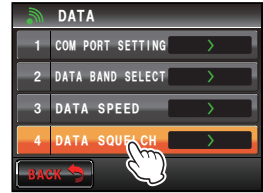
Setting the output condition of the squelch detection and squelch terminal

The squelch detection condition during APRS (internal modem) operation and squelch terminal output condition of the data communication (when using the [DATA] jack at the back of the main body) can be set.

- 1 Press **[DMS]** for one second or longer
 The set-up menu will be displayed.
- 2 Touch **[DATA]**



- 3 Touch **[4 DATA SQUELCH]**
 The screen for the detailed settings will be displayed.



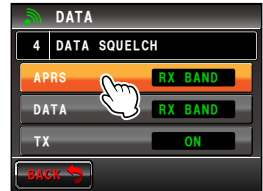
- 4 Touch **[APRS]** to select the squelch detection condition during APRS operation using the internal modem

The setting switches between “RX BAND” and “TX/RX BAND” each time it is touched.

RX BAND: Transmission is not possible when the receive band squelch is open.

TX/RX BAND: Transmission is not possible when either the receive band or transmit band squelch is open.

Tip Factory default value: RX BAND



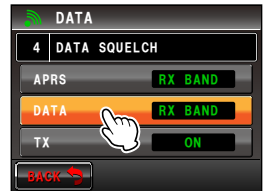
- 5 Touch **[DATA]** to select the output condition (during reception) related to the squelch terminal inside the [DATA] jack

The setting switches between “RX BAND” and “TX/RX BAND” each time it is touched.

RX BAND: The SQL terminal becomes active when the receive band squelch is open.

TX/RX BAND: The SQL terminal becomes active when either the receive band or transmit band squelch is open.

Tip Factory default value: RX BAND



Using the Set-up Menu

6 Touch **[TX]** to select the output condition (during transmission) related to the squelch terminal inside the **[DATA]** jack

Each time this is touched, the setting will switch between “ON” and “OFF”.

ON: The SQL terminal becomes active during transmission.

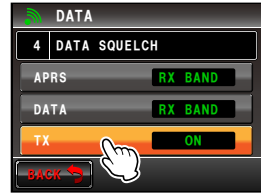
OFF: The SQL terminal does not become active during transmission.

- The action to be taken when the reception band specified using **[DATA]** under **[2 DATA BAND SELECT]** in the DATA set-up menu is ready to transmit is set here.
- When this is set to ON, transmission of external devices such as TNC can be suppressed during transmission.

Tip Factory default value: ON

7 Press **[CHSP/SEND]** for one second or longer

The APRS and data communication squelch will be set and the display will return to the previous screen.



APRS function settings

The APRS function of the radio is a data communication system for data such as messages and station position using the APRS format.

Refer to the separate Operating Manual APRS Edition for details (download the manual from the YAESU website).

Micro-SD card settings

Writing settings to the micro-SD card

Using a micro-SD card, the memory channels registered in the radio and the settings in the set-up menu can be copied to another FTM-400XDR/DE.

The settings saved in the micro-SD card can also be downloaded into the radio. Refer to “Copying the Radio Data to another transceiver” (P.151) for details.

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Writing group IDs to the micro-SD card

The group ID information registered in the radio can be written to a micro-SD card. The group ID information saved in the micro-SD card can also be downloaded into the radio.

Refer to the separate Operating Manual GM Edition for further details (download the operating manual from the YAESU website).

Initializing the micro-SD card

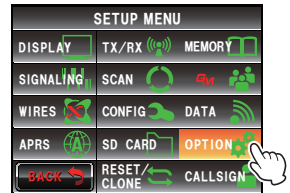
Initialize the memory card when using a new micro-SD card. Refer to “Initializing the micro-SD card” (P.35) for details.

Optional device settings

Setting the image of the connected speaker microphone with camera

The image size and quality when taking pictures with the connected speaker microphone with a camera (MH-85A11U) can be set.

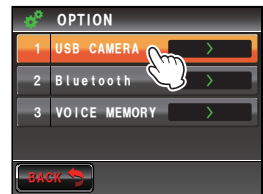
- 1 Press **[DMS]** for one second or longer
The set-up menu will be displayed.
- 2 Touch **[OPTION]**



- 3 Touch **[1 USB CAMERA]**

The screen for setting the image will be displayed.

- **PICTURE SIZE:** Sets the size of the picture to be taken.
- **PICTURE QUALITY:** Sets the quality of the picture to be taken.



- 4 Touch **[PICTURE SIZE]** to set the picture size

The setting changes between “160*120” and “320*240” each time it is touched.

- Tip**
- Factory default value: 320*240 (unit: pixel)
 - It takes about 30 seconds to sending a picture in the size of 320*240 to other transceivers.

